

Rural Areas and HIV Risk

Surveillance data indicates that geographic distribution of AIDS emerged in urban areas and has spread to more rural areas in the Southeastern United States (Steinberg & Fleming, 2001). More than half of rural AIDS cases are in the South, even though the South accounts for only 35% of the nation's population (National Rural Health Association, 2007). While the incidence of HIV and AIDS in rural regions of Virginia has remained below the incidence in urban regions, factors such as geography, availability of health care and social services, and community perceptions make prevention and treatment of HIV/AIDS in rural areas a challenge.

Of the 16,483 Virginians diagnosed with AIDS through 2006, 1,356 live in a rural area, based on the Office of Management and Budget definition (Figure 1). In 2006, the number of male cases of HIV/AIDS in rural Virginia accounted for 80% of the total diagnosed rural cases. Nearly 23% of these cases involved those who reported a risk of infection as men who have sex with men and 10% are injection drug users. For women in rural areas, 50% of diagnosed HIV/AIDS cases reported a risk of infection as heterosexual contact and more than 18% were injection drug users. From 2002-2006, the highest percentage of diagnosed cases of HIV/AIDS in rural Virginia were in the Central Health Region.

Migration from rural to urban areas is difficult to determine. Cases of HIV/AIDS are reported by place of residence at time of diagnosis. Many men who have sex with men and live in rural areas, tend to engage in risk behavior in urban centers. The surveillance data may be misleading if large numbers of people move to other areas after being diagnosed with HIV (McKinney, 2002). In the mid-1990's, the CDC sponsored interviews with 608 HIV-positive residents of rural areas. Sixty-five percent of the respondents reported living outside their current county at least one-month prior to HIV diagnosis. Of the 65%, more than half reported moving to a rural area after learning they were HIV-positive (Lansky, 2000).

In general, access to rural health care services



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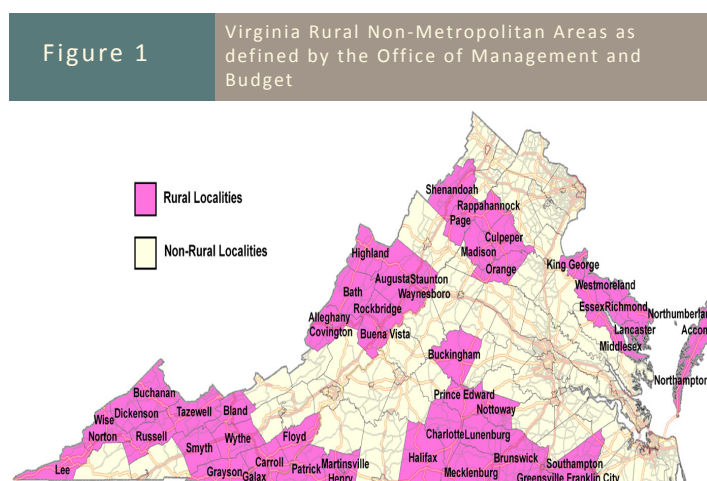
Nearly 23% of diagnosed cases of HIV/AIDS among men in rural areas cases reported a risk of infection as MSM.

For women in rural areas, 50% of diagnosed HIV/AIDS cases reported a risk of infection as heterosexual contact, and more than 18% were injection drug users.



are limited. Although barriers are still present in urban areas, large cities often have a number of physicians who specialize in treating HIV/AIDS and other infectious diseases. Rural areas tend to have practitioners with little experience in treating HIV infected patients (Stephenson, 2000). According to the American Public Health Association, only nine percent of physicians in the United States practice in rural areas. In Virginia, only 35% of hospitals are located in rural areas (North Carolina Rural Health Research and Policy Analysis Center, 2007). The lack of rural health infrastructure, including primary care physicians, dentists and mental health professionals, requires many people living with HIV to travel long distances for routine care. Inability to afford health insurance is another barrier to accessing care in rural communities. In 2000, eight percent of Virginia's rural population was uninsured (Census, 2000). Approximately one-third of HIV-positive individuals living in rural areas lack access to personal or public transportation (Heckman et al, 1998).

Social isolation and social stigma remain powerful forces in many rural communities and are additional barriers to effective HIV prevention services. Concerns about confidentiality, stigma, and discrimination often cause HIV-positive individuals to delay testing and treatment or to travel to distant medical centers for care (Castanea, 2000). In order to optimize HIV prevention and care for rural residents, service delivery models need to emphasize geographic barriers, availability of health care and social services, and community perceptions.



*Source: Office of Management and Budget (OMB)
All counties/cities that are not designated as parts of Metropolitan Areas (MAs) are considered rural by the OMB.
The current list of MAs, issued in January 2005, is available on the Internet at
<http://www.census.gov/population/www/estimates/metrodef.html>

REFERENCES

- Castaneda, D. (2000). HIV/AIDS-related services for women and the rural community context. *AIDS Care*, 15, 549-565.
- Census. Model based Small area health insurance estimates for cities and states: 2000. Bureau of the Census. 15 October 2007.
<http://www.census.gov/cgi-bin/hhes/sahie/sahie.cgi>
- Heckman, T. G., Somlai, A. M., Peters, J., Walker, J., Otto-Salaj, L., Galdabini, C. A., & Kelly, J. A. (1998). Barriers to care among persons living with HIV/AIDS in urban and rural areas. *AIDS Care*, 10, 365-375.
- Lansky A, Nakashima AK, Diaz T, et al. (2000) Human Immunodeficiency Virus infection in rural areas and small cities of the Southeast: contributions of migration and behavior. *J Rural Health*. 16(1):20 - 30.
- McKinney, M. (2002). Variations in Rural AIDS Epidemiology and Service Delivery Models in the United States. *J Rural Health*, 18, 455-466.
- National Rural Health Association. (2007). HIV/AIDS in Rural America [Brochure]. Retrieved October 15, 2007, from http://www.nrharural.org/eNews/Rural_fs.pdf
- North Carolina Rural Health Research and Policy Analysis Center. (2007). Retrieved October 15, 2007, from http://www.shepscenter.unc.edu/research_programs/rural_program/
- Steinberg, S., & Fleming, P. (2001). The geographic distribution of AIDS in the United States: Is there a rural epidemic? *Am J Public Health*, 16, 11-19.
- Stephenson, J. (2000). Rural HIV/AIDS in the United States Studies Suggest Presence, No Rampant Spread. *JAMA*, 284, 167-168.